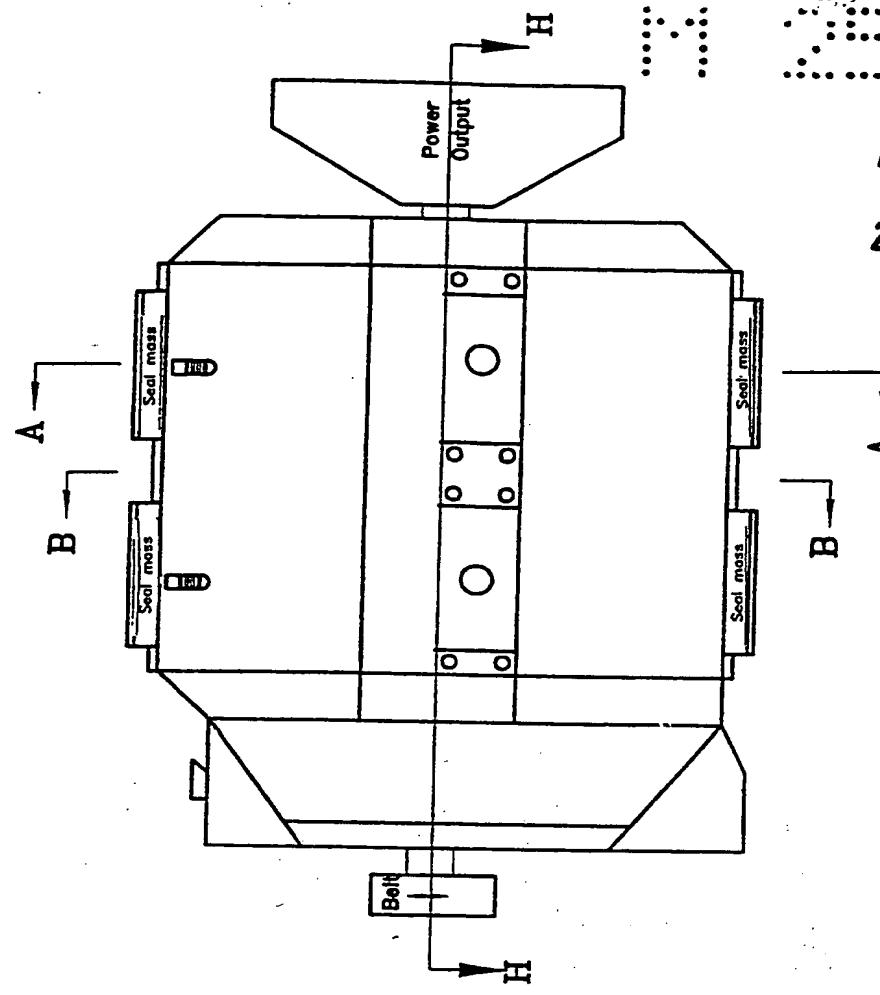


DO NOT FOLD OR FOLDING 528560



M 25.09.99

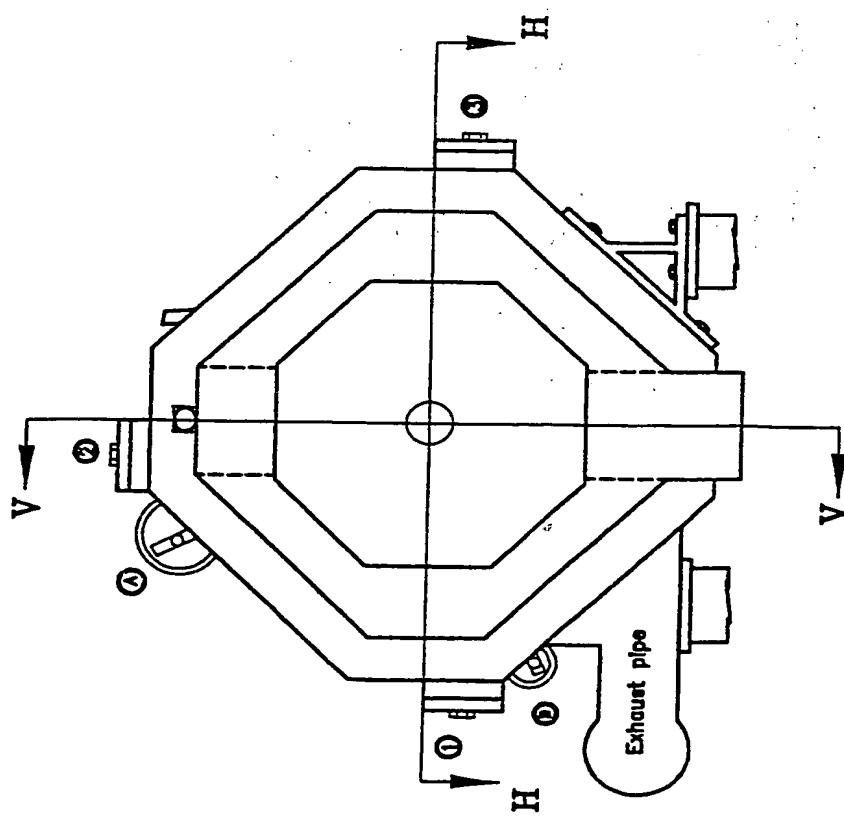
EPO - Munich  
40

25. Sep. 1999

TYPICAL SHAPE - SIDE VIEW

F 1.a

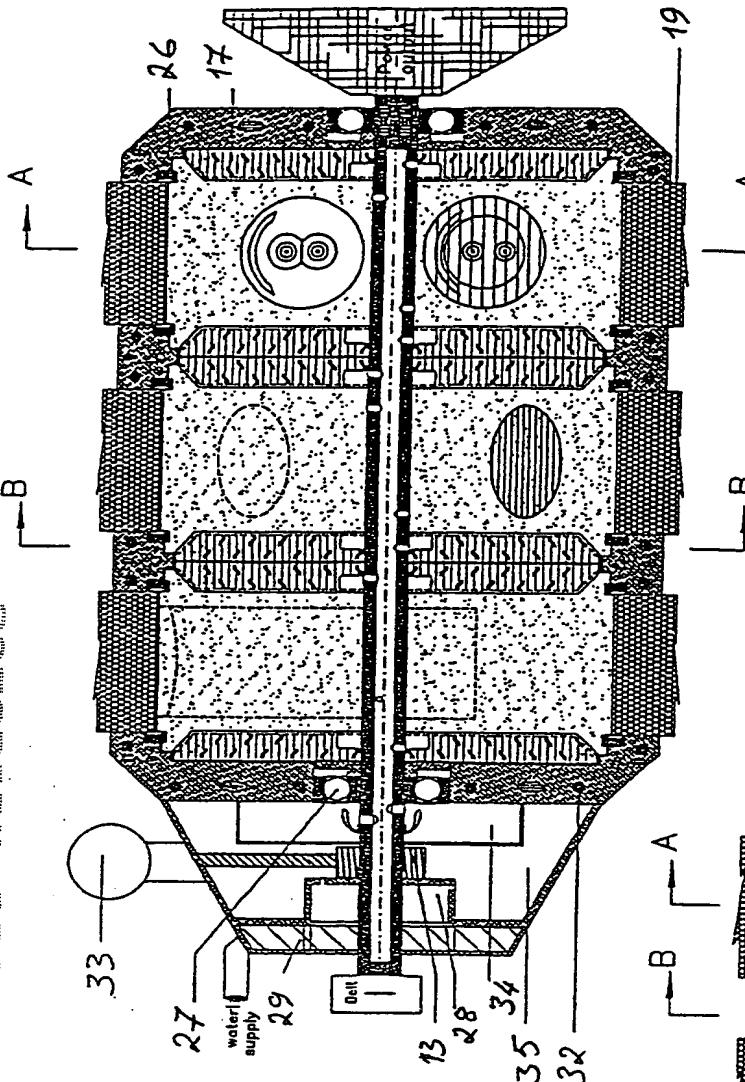
Fig-1



TYPICAL SHAPE - FRONT VIEW

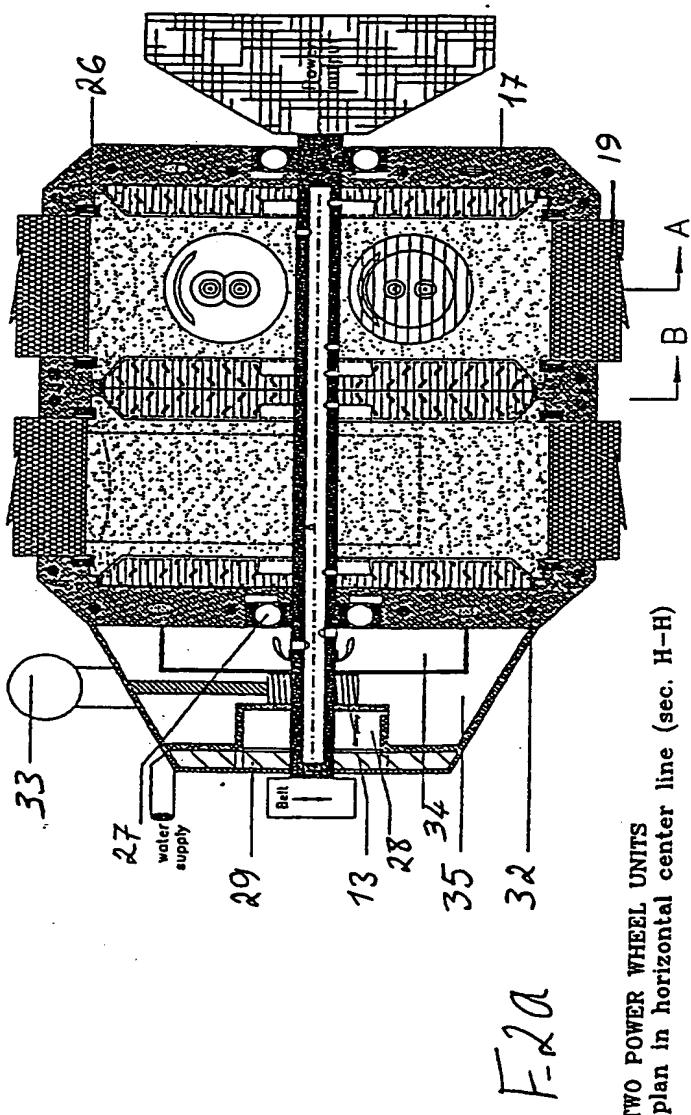
F 1.b

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## THREE POWER WHEEL UNITS Section plan in horizontal center line (sec. H-H).

F-<sup>2</sup>b



## TWO POWER WHEEL UNITS Section plan in horizontal center line (sec. H-H)

Fig - 2

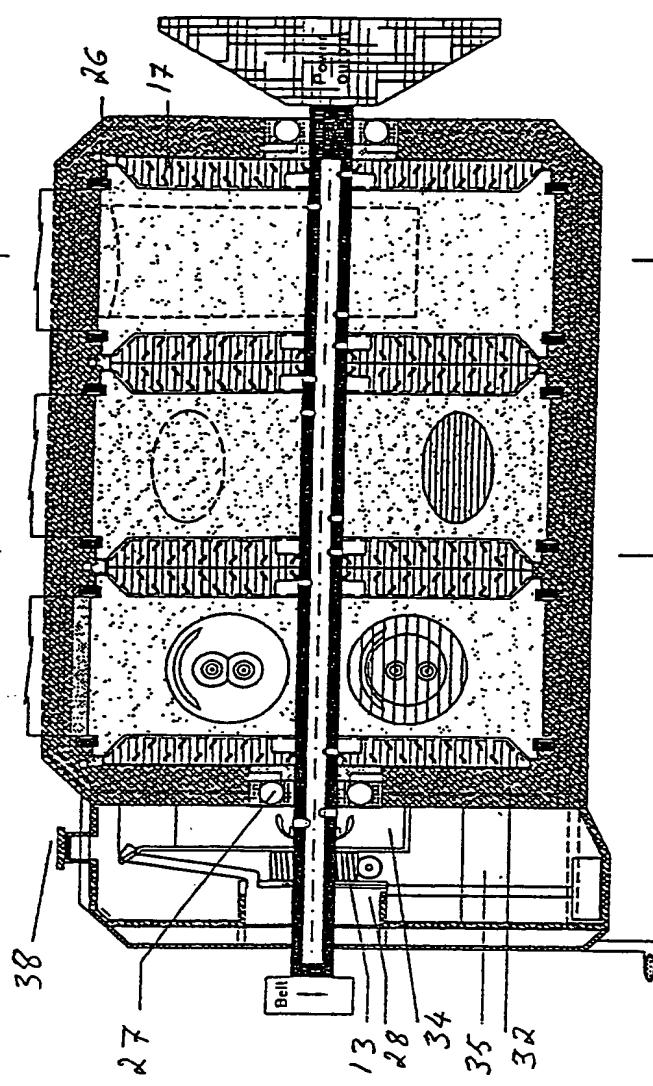
28.09.96

**AMENDED SHEET**

DET 60 " IN E S 28560

A

B



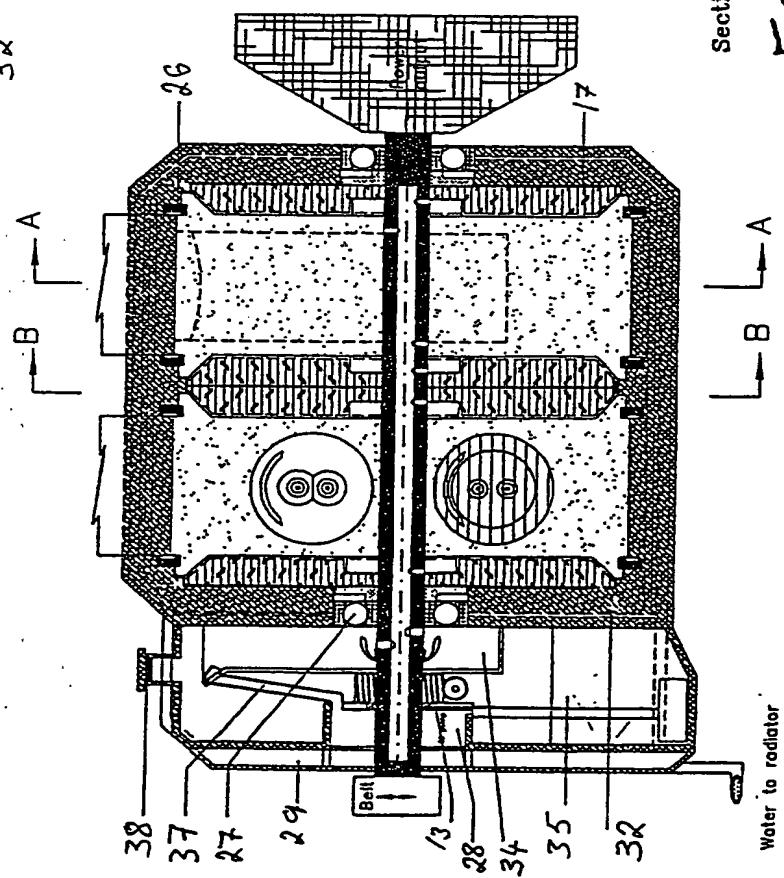
THREE POWER WHEEL UNITS  
Section plan at vertical center line (sec. V-V)

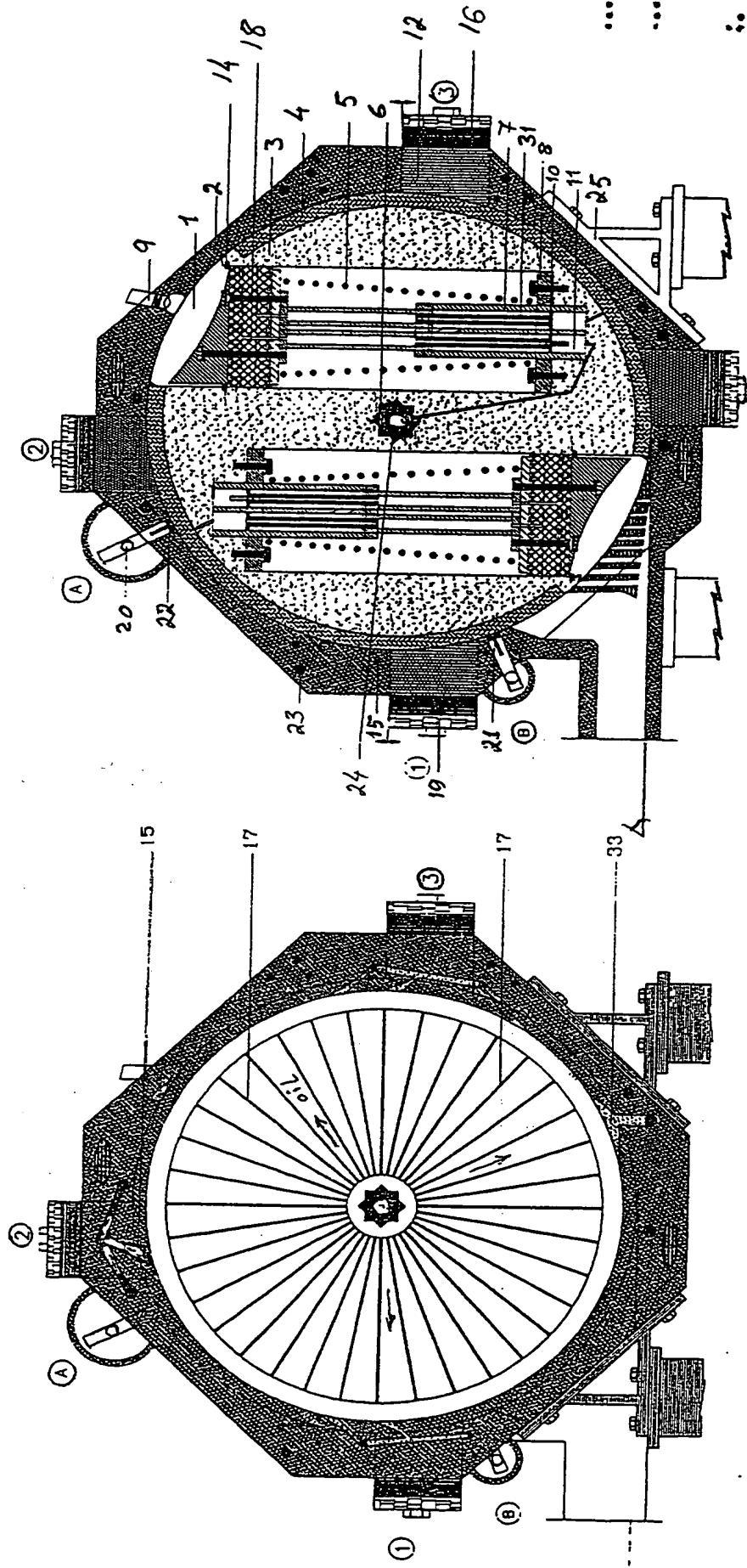
F-3b

M 25.09.93

TWO POWER WHEEL UNITS  
Section plan at vertical center line (sec. V-V)

F-3a





M 25.09.99

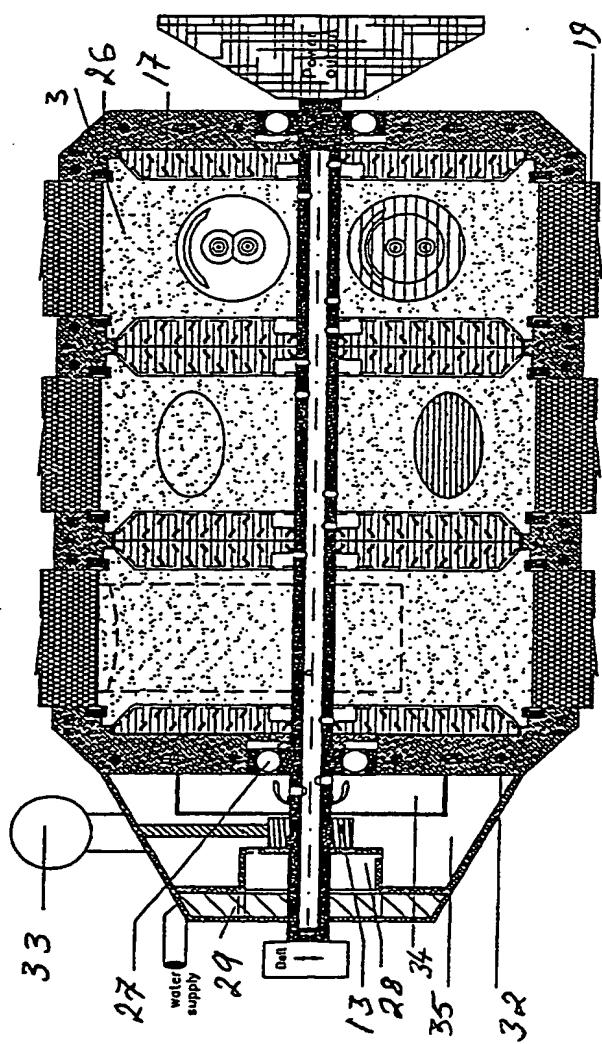
SECTION A - A  
F-4a

SECTION B - B  
F-4b

AMENDED SHEET  
4/15

- Fig - 4 -

DOE 160 " 452560

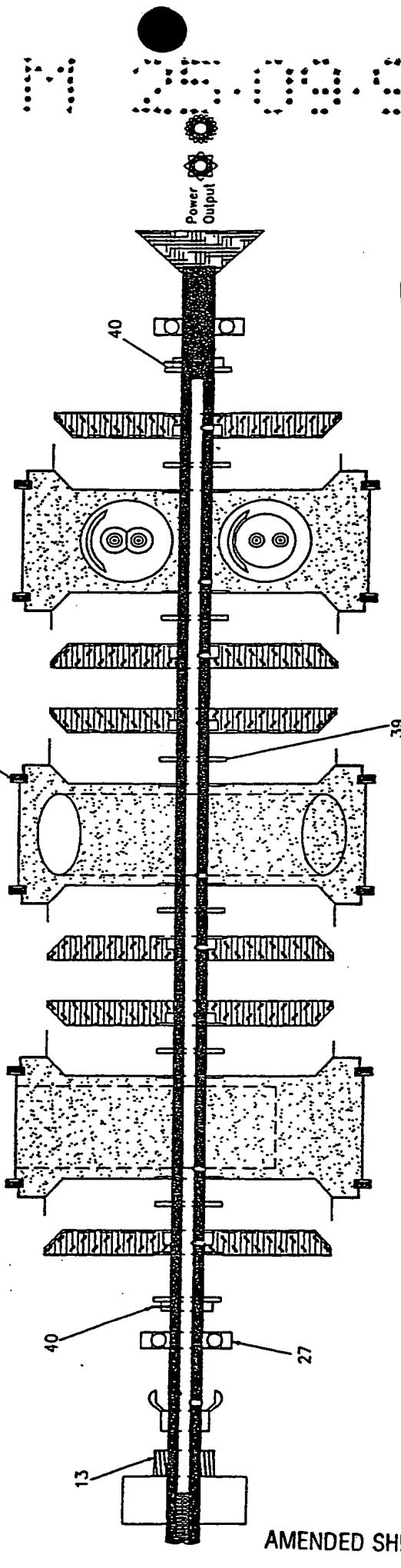


F-5a

Section - Plan in horizontal C.L.

No. 3  
F-5b

5/27



AMENDED SHEET

F-5c

ROTATING PARTS ANALYSIS ON THE CRANK

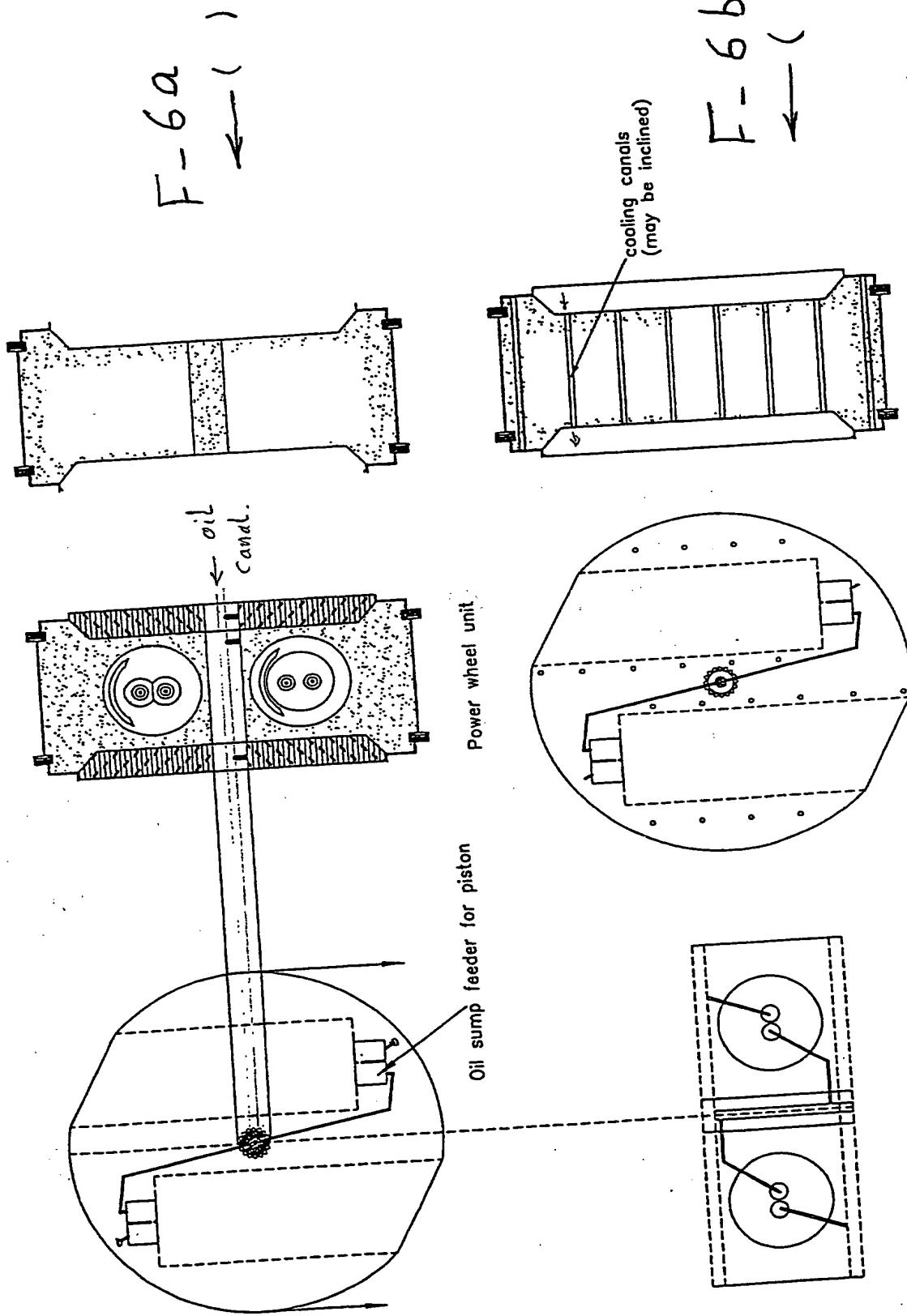
Fig - 5 - 5

M 25.09.50

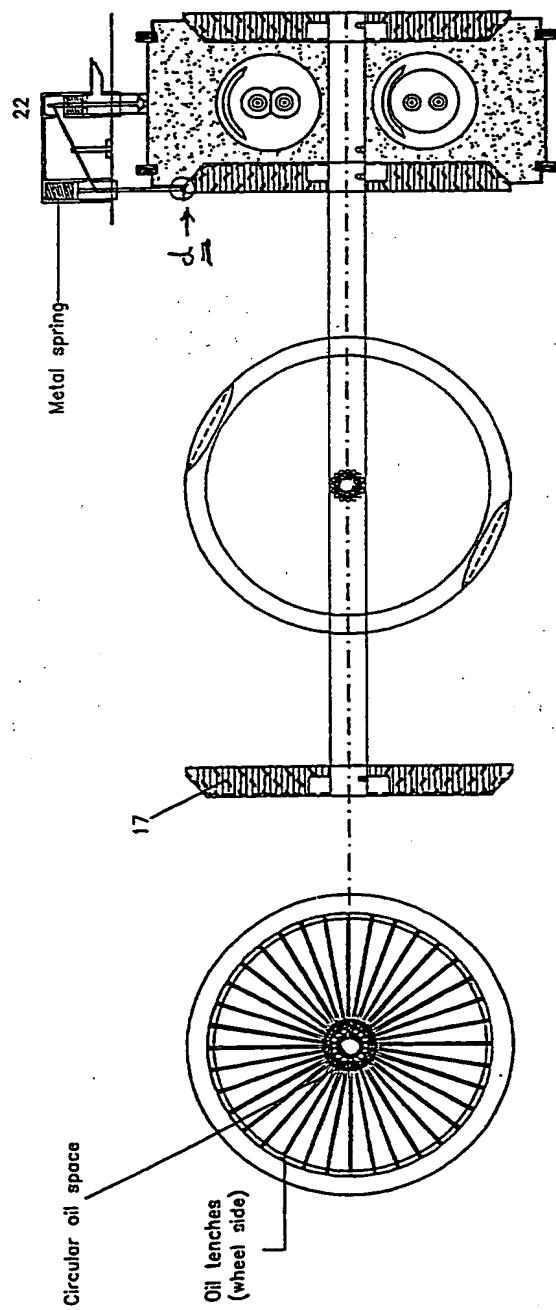
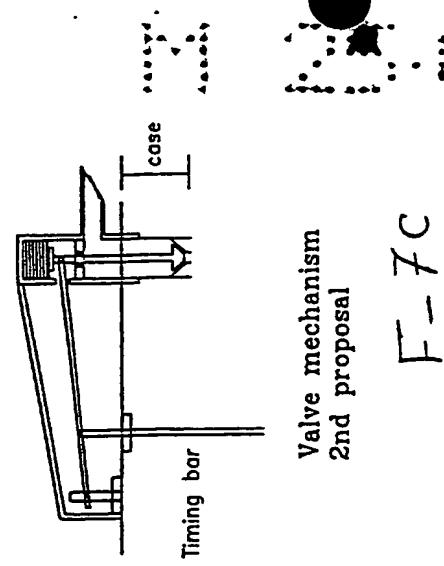
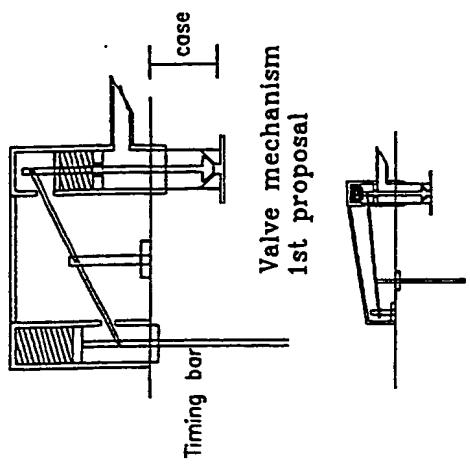
DET 50 "HE 928560

M 25.03.90

-Fig-6

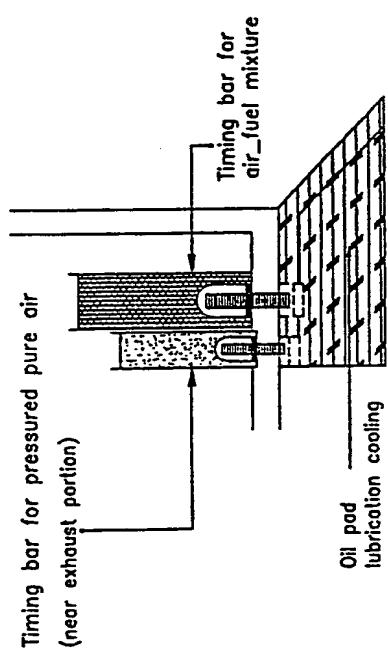


22.09.99

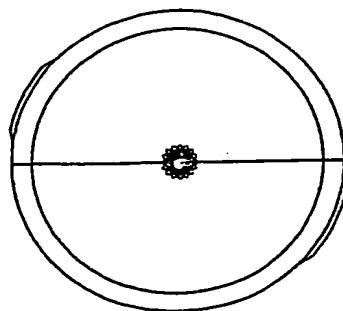


F-7a

1st proposal of timing system  
for valve mechanism  
(Lower points pad circular edge)



F-7b



F-7d

one pad - two valve timing system -  
(Typical performance)

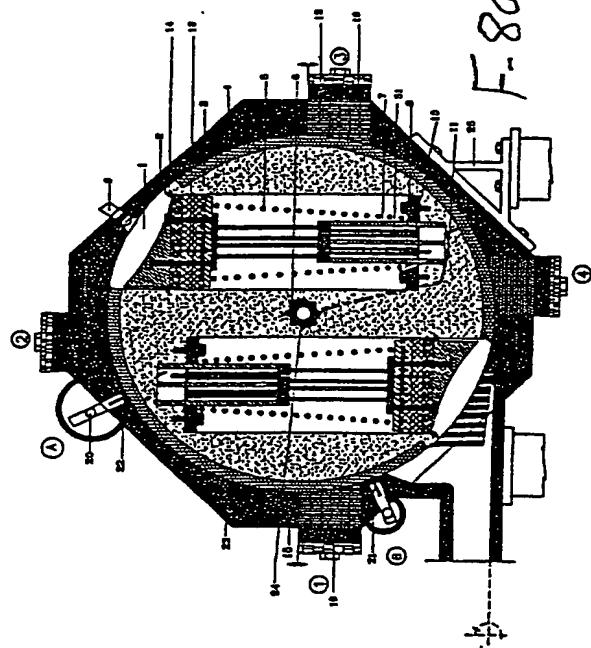
- Fig. 7 -

F-7c

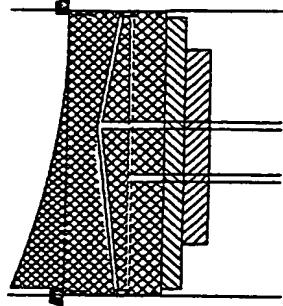
AMENDED SHEET

- 7/25 -

四庫全書

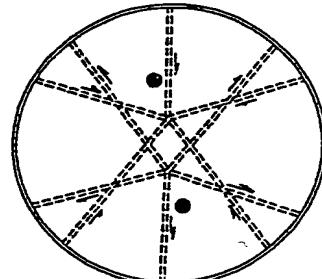
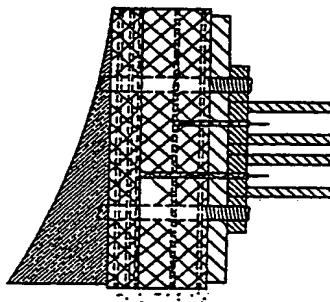


E-8a

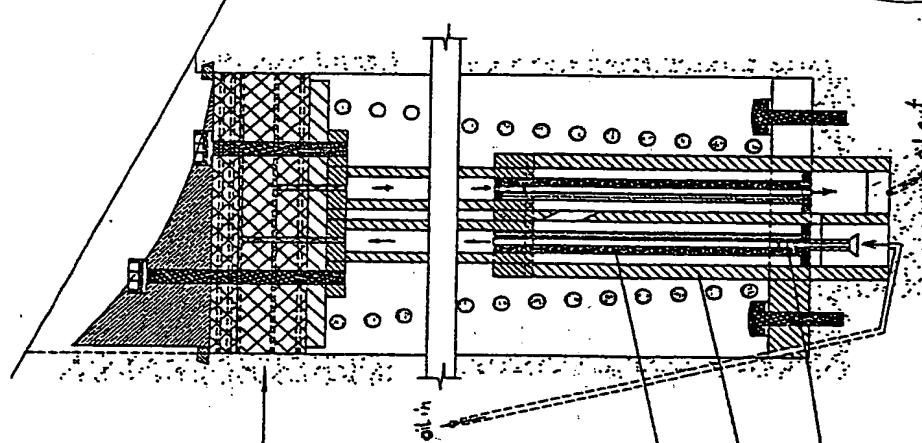


## **Proposal 2**

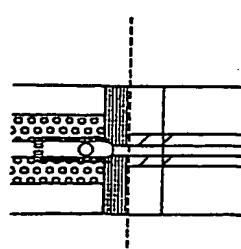
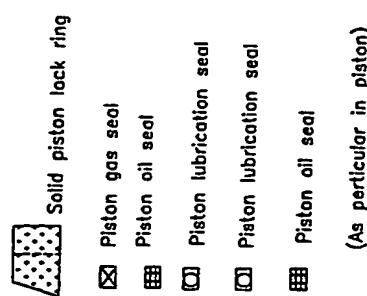
### For the piston. lubrication



### PISTON OIL CANALS DISTRIBUTION



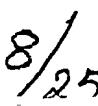
### TYPICAL CYLINDER PISTON



DETAIL 22

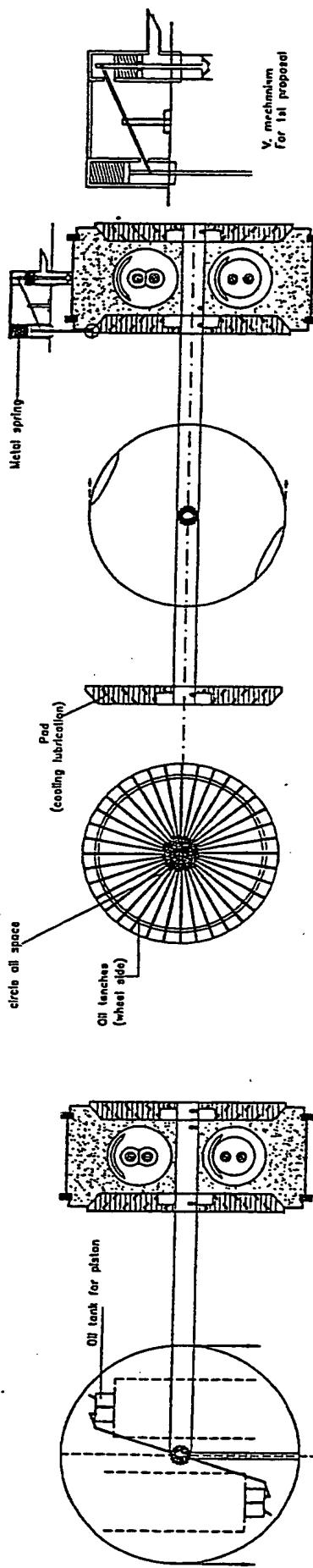
8d  
Li

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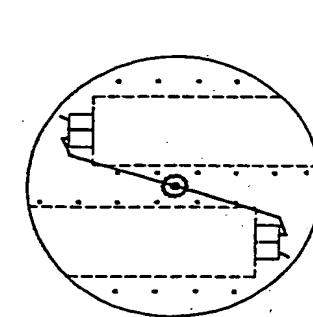
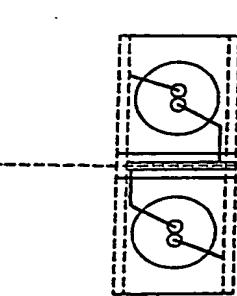
**AMENDED SHEET**

1005160 " FILE 928560



1st proposal of timing system  
with valve mechanism  
(lower points pad circular edge)

LUBRICATION\_COOLING\_PAD



PISTON INLET\_OUTLET\_OIL\_SYSTEM

F- 9a

Proposal for additional cooling oil holes in the wheel

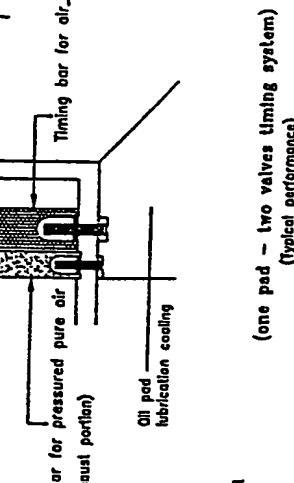
F- 9c

V. mechanism  
for 2nd proposal

F- 9d

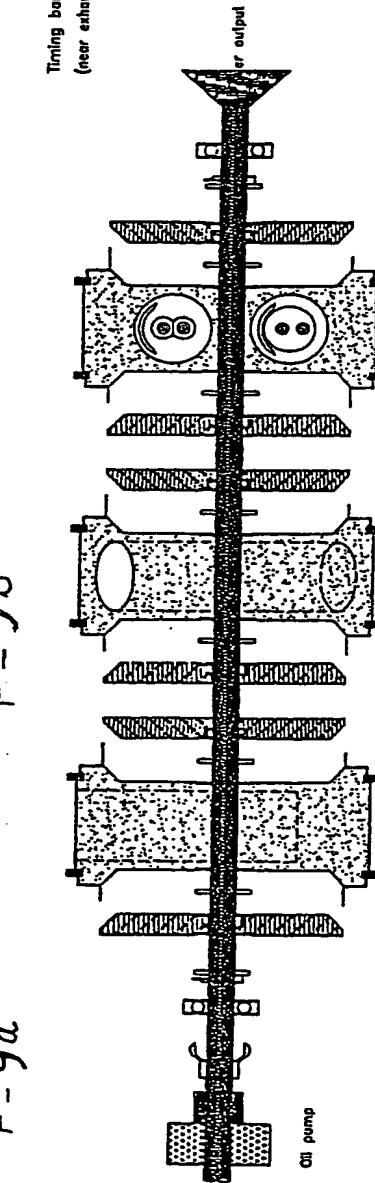
AMENDED SHEET

- 9/15 -



F- 9e

(one pad - two valves timing system)  
(Typical performance)



NOTE  
(On inlet hole on shaft as per each part it is not as per scale)

ROTATING PARTS ANALYSIS ON THE CRANK

F- 9f

= Fig - 9 =

25.00.90

INDIA 60 - File 923560

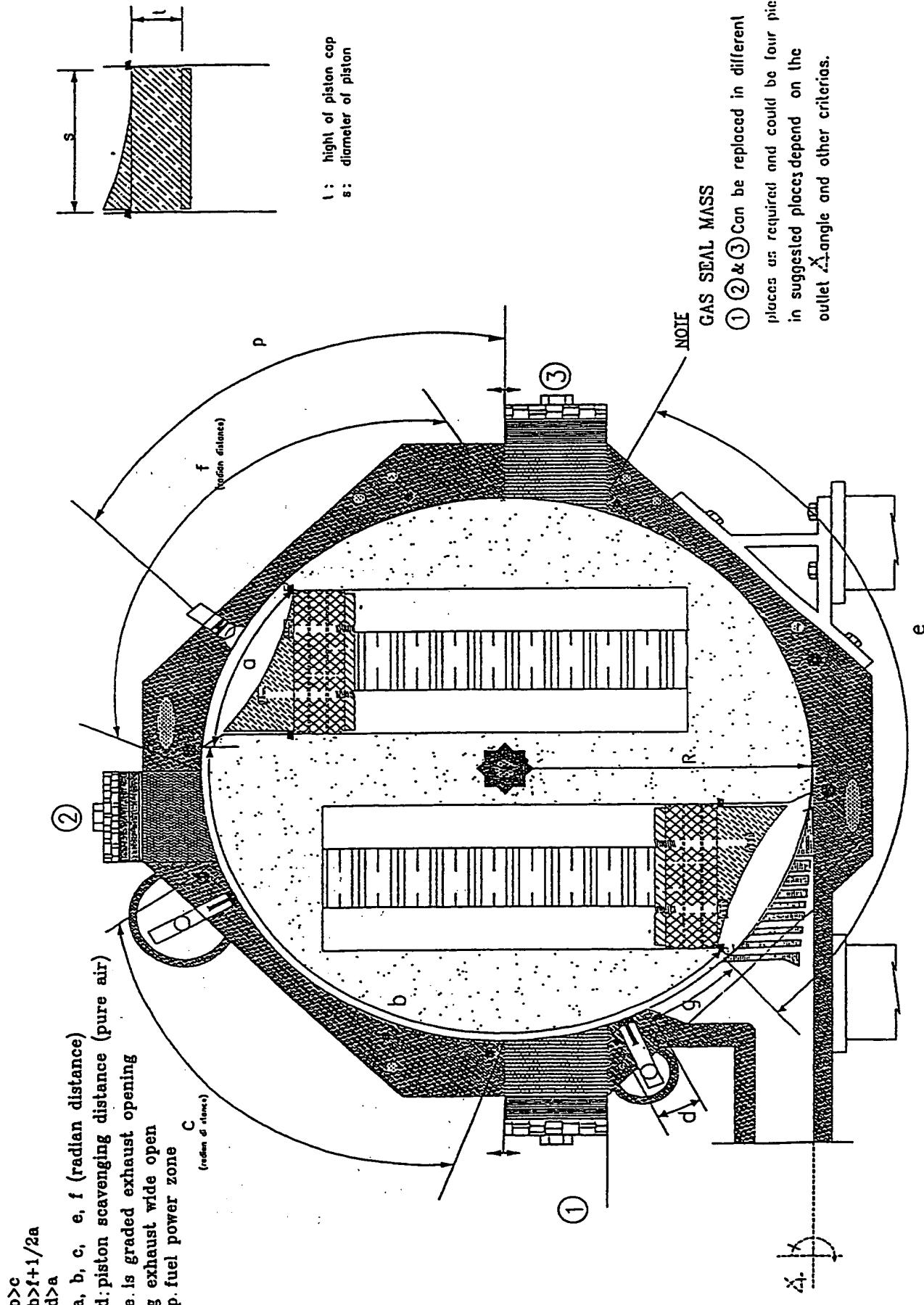
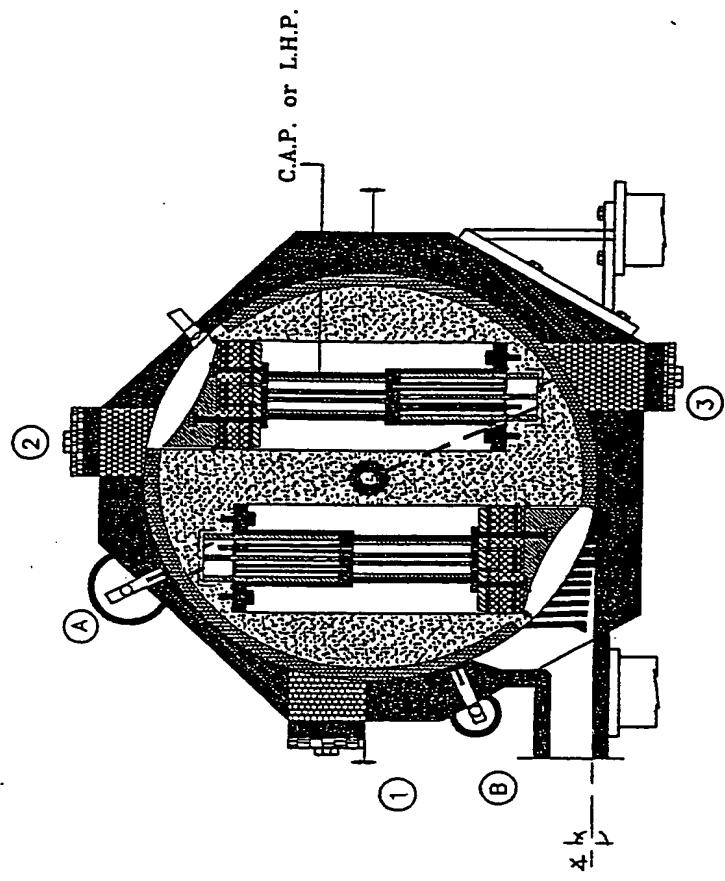


Fig-10

SECTION A - A

M 24-09-90

C.A.P. : Compressed Air Device.  
L.H.P. : Liquid Hydraulic Device.

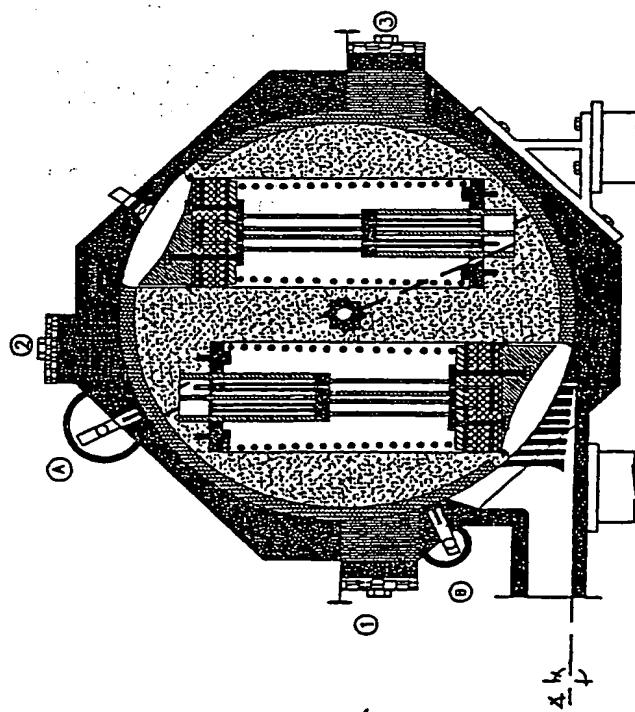


Hydraulic (device) push arm modification  
Compressed air power modified  
or liquid (oil) power modified

Fig-11

F-11 a

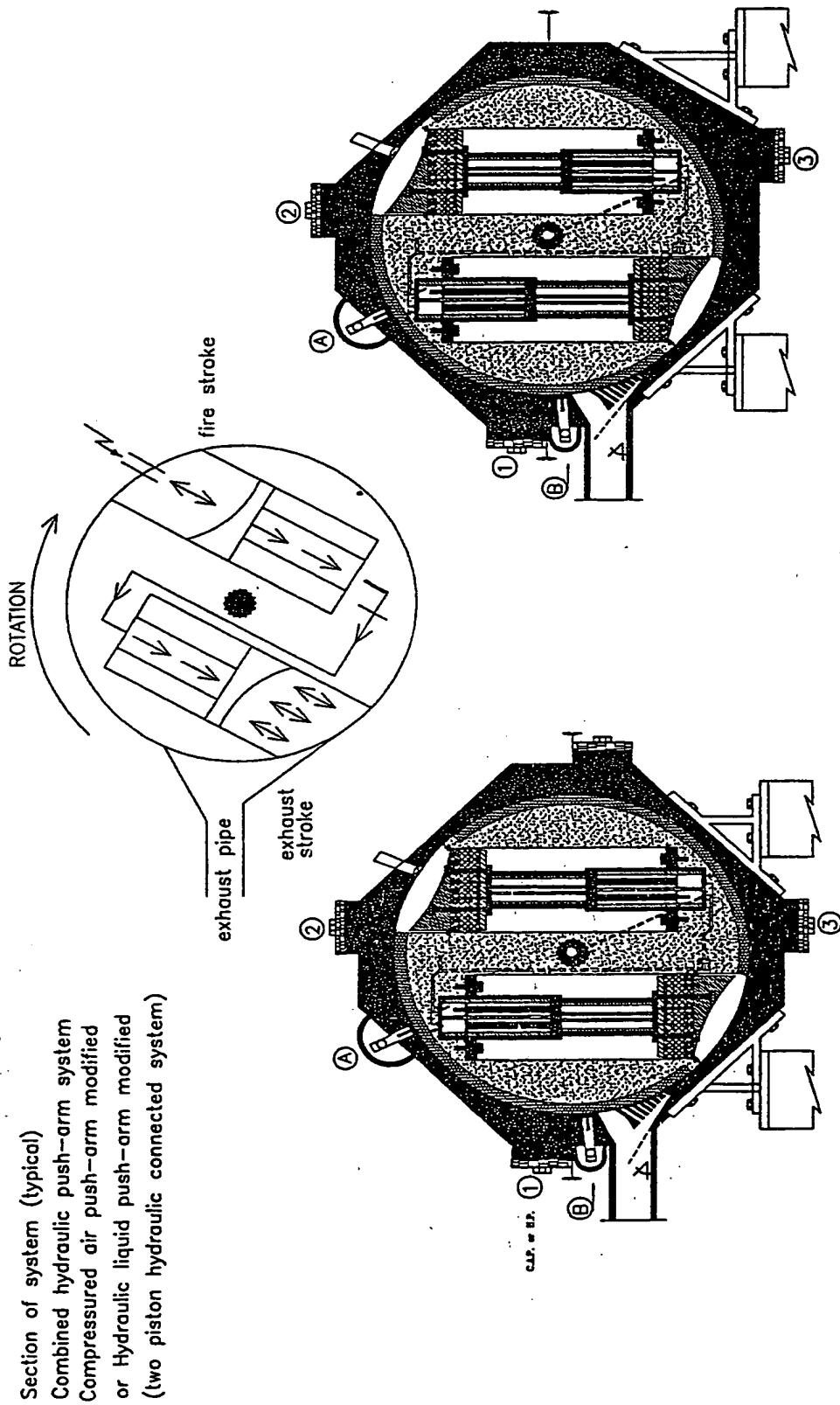
Spring push-arm modification



11/25

AMENDED SHEET

C.H.S. : Connected Hydraulic system Push arm WHEEL



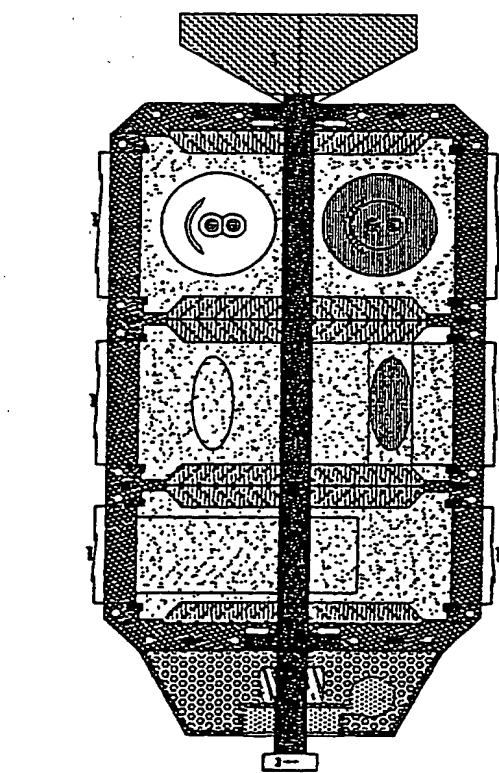
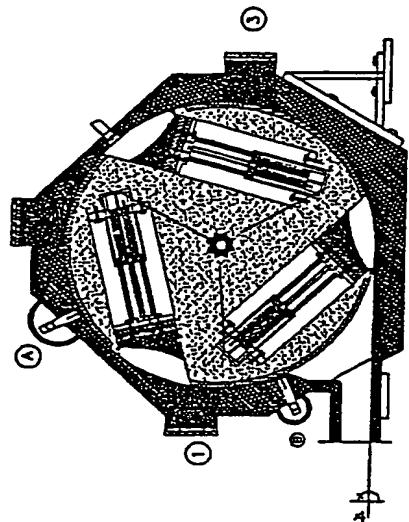
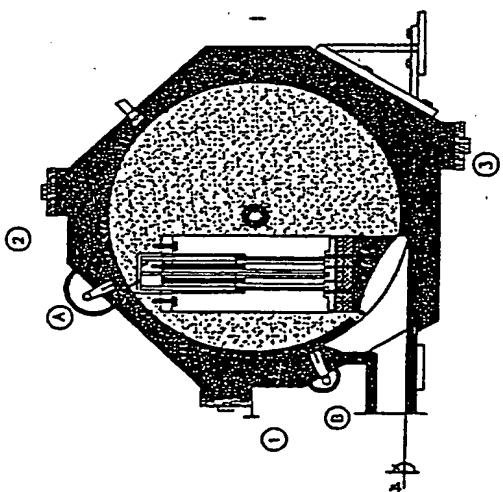
F-12 b

Fig-12

F-12 a

M 25-09-95

016522E244 - 01612C0



F-13d

Fig-13

M 25.09.99

001300 - 342685950

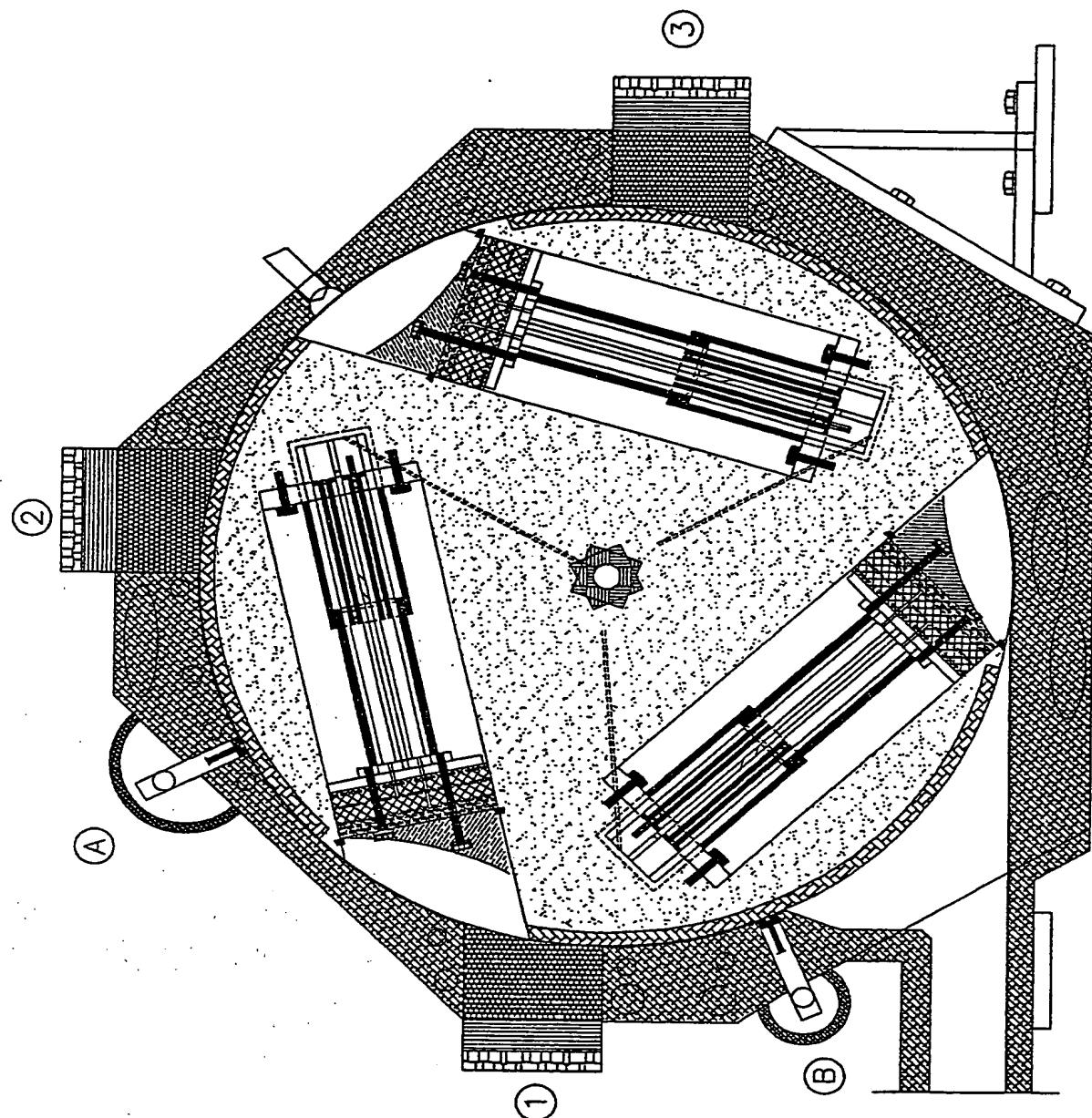


Fig - 14

M 25-09-99

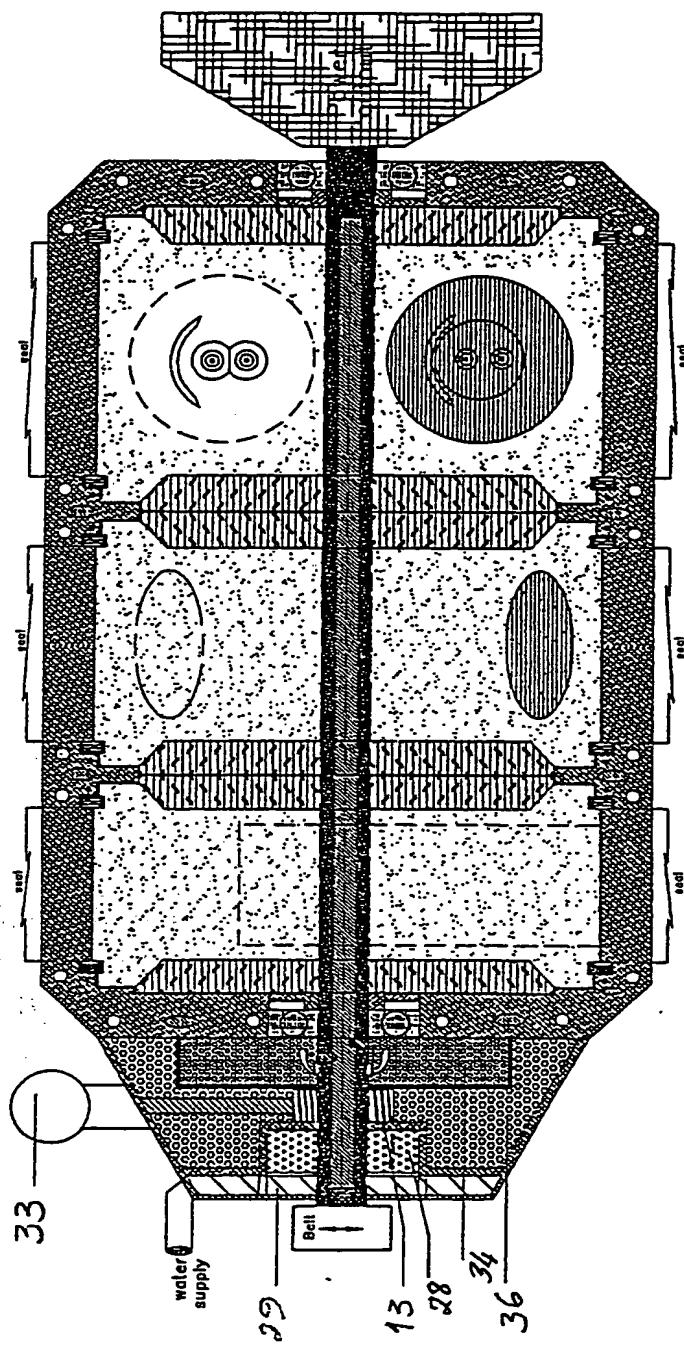


Fig-15

M 25-09-99

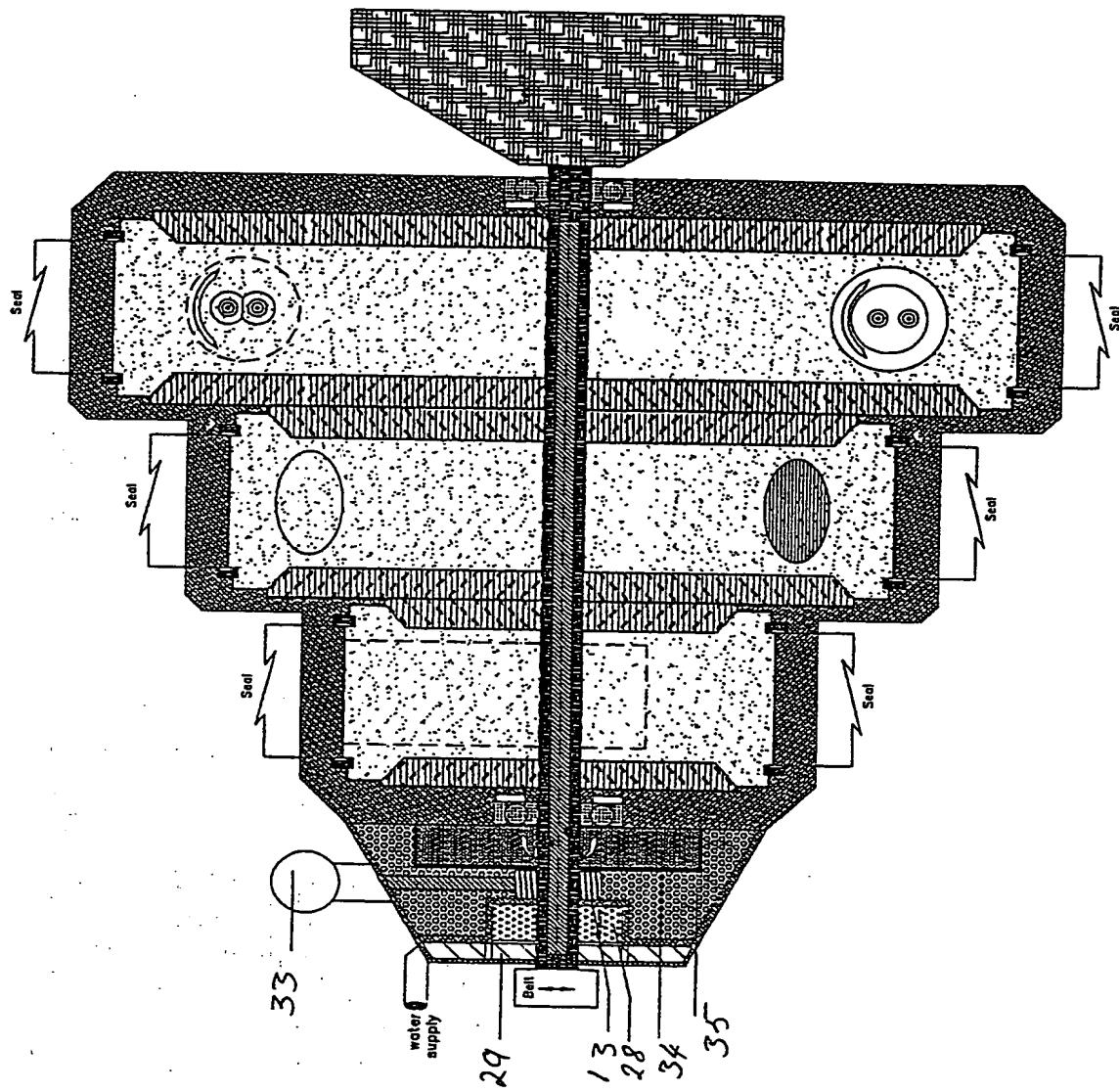


Fig - 16

M 25.09.99

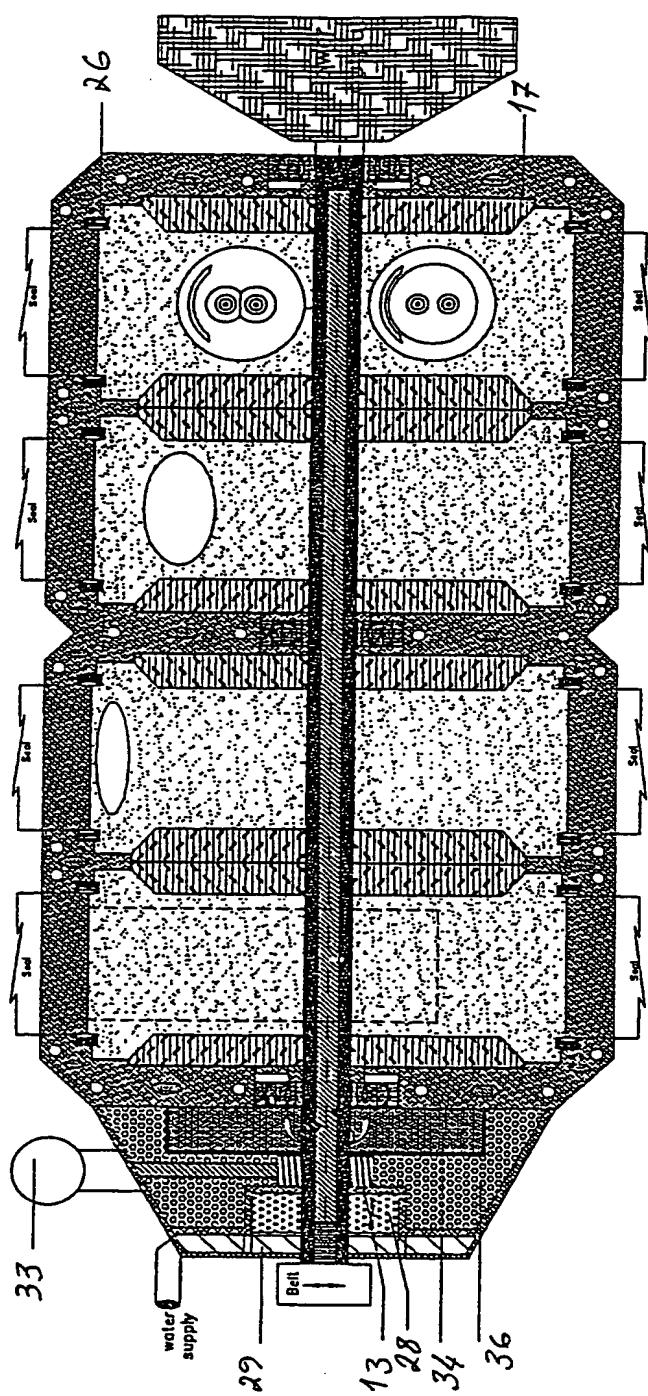
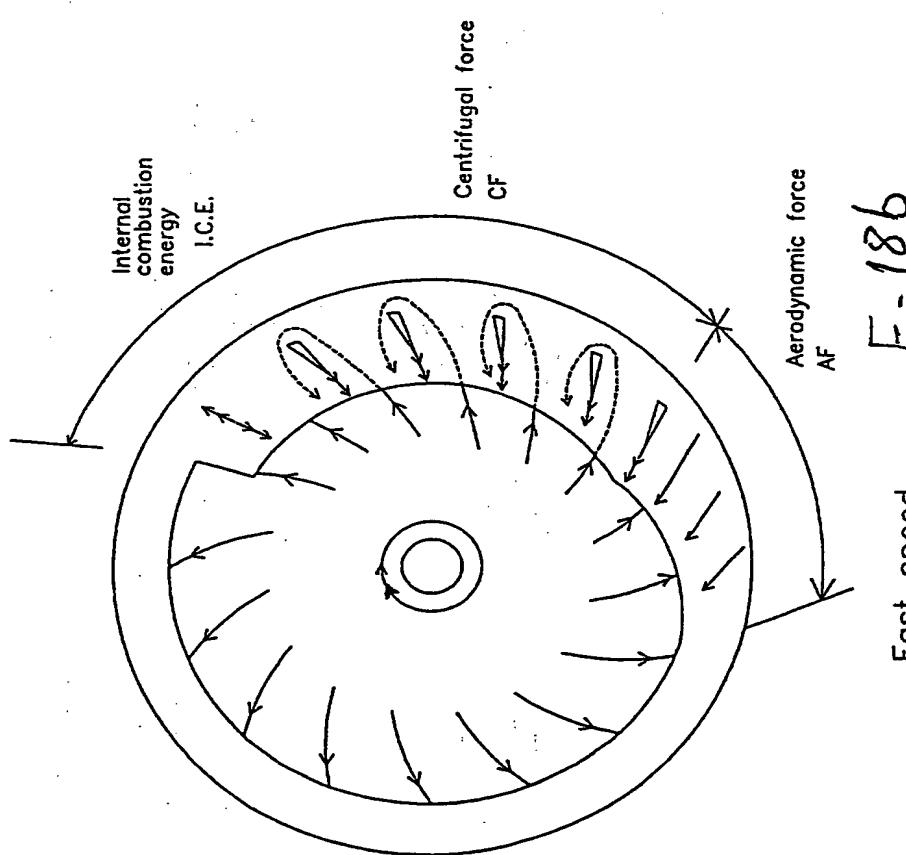


Fig-17

DETAILS OF ENGINE FORCES



$$P = I.C.E. + C.F. + A.F.$$

Fast speed

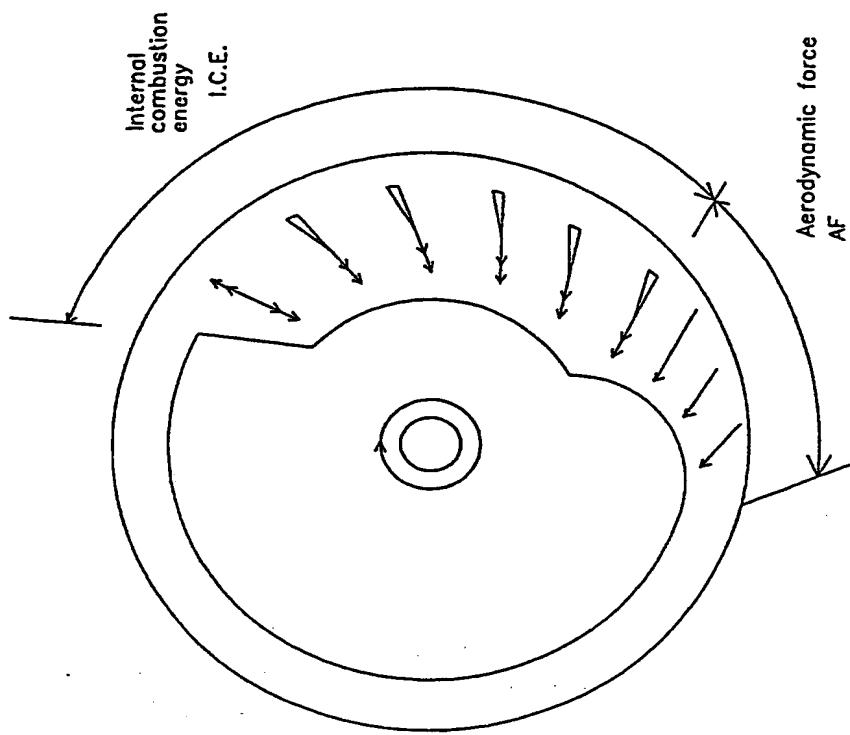
F-186

Aerodynamic force  
AF

$F-18a$

Slow speed

$$P = I.C.E. + A.F.$$



Aerodynamic force  
AF

$F-18a$

Fig - 18

Component elements are not in actual scale

NOTE

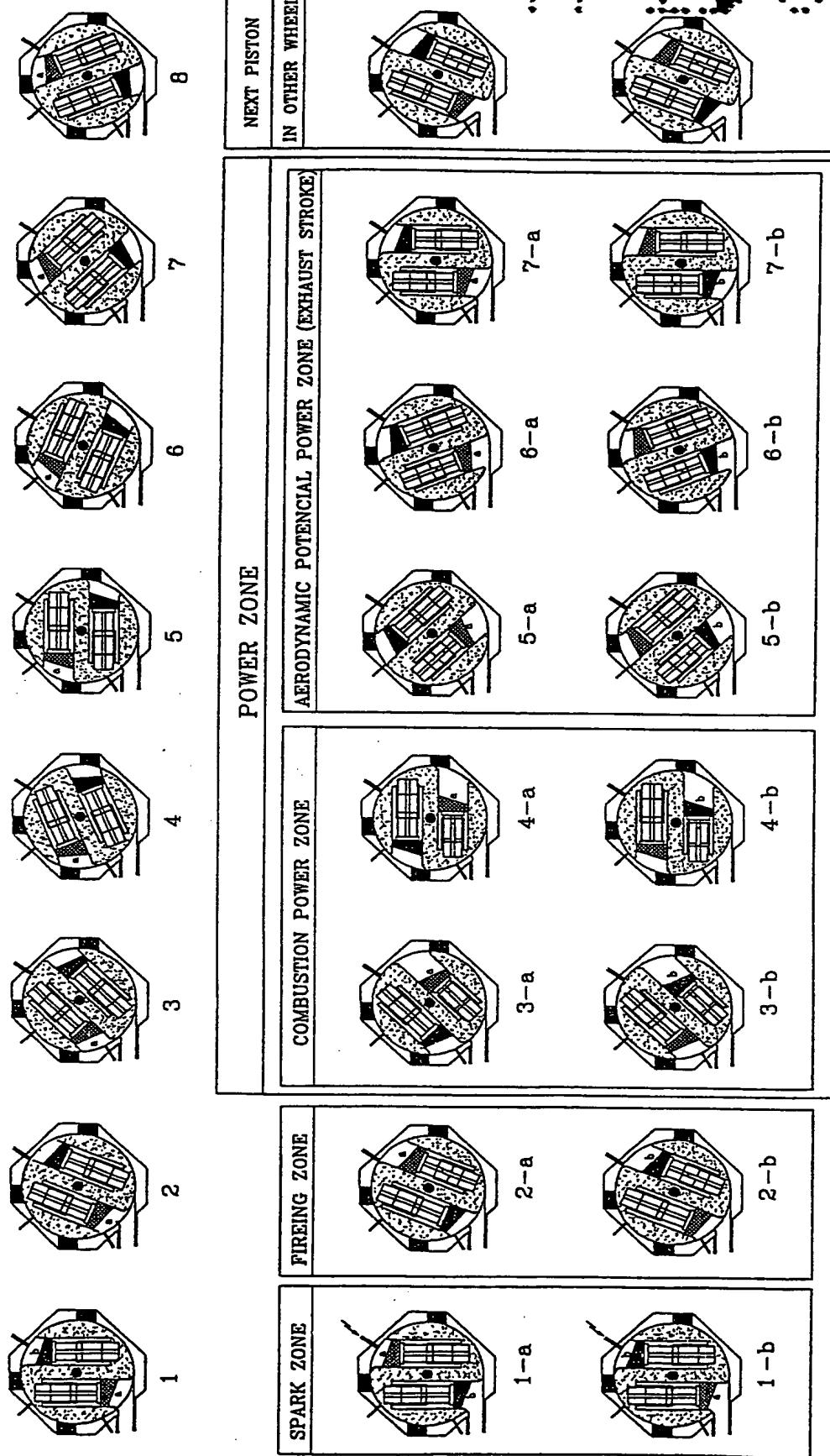


Fig-19

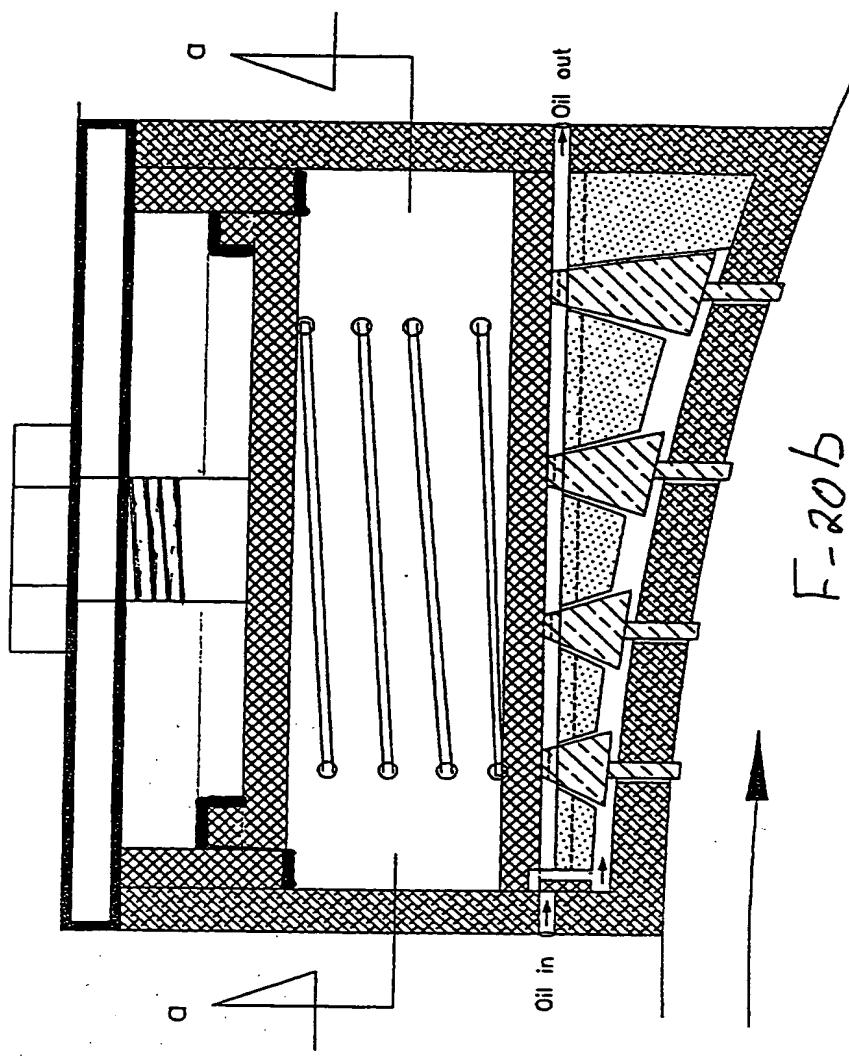
Ignition of piston  
(a) starting self  
rotation

19/

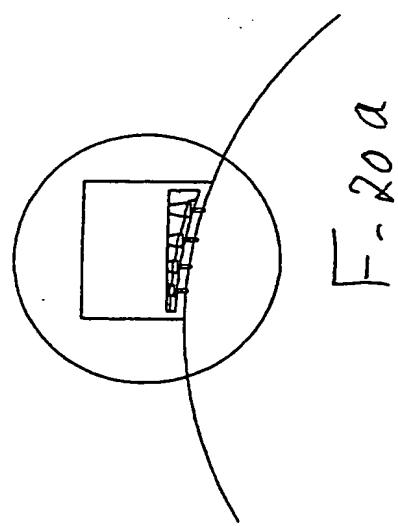
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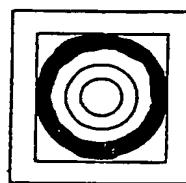
Proposal for seal mass



F-20 b



F-20 a

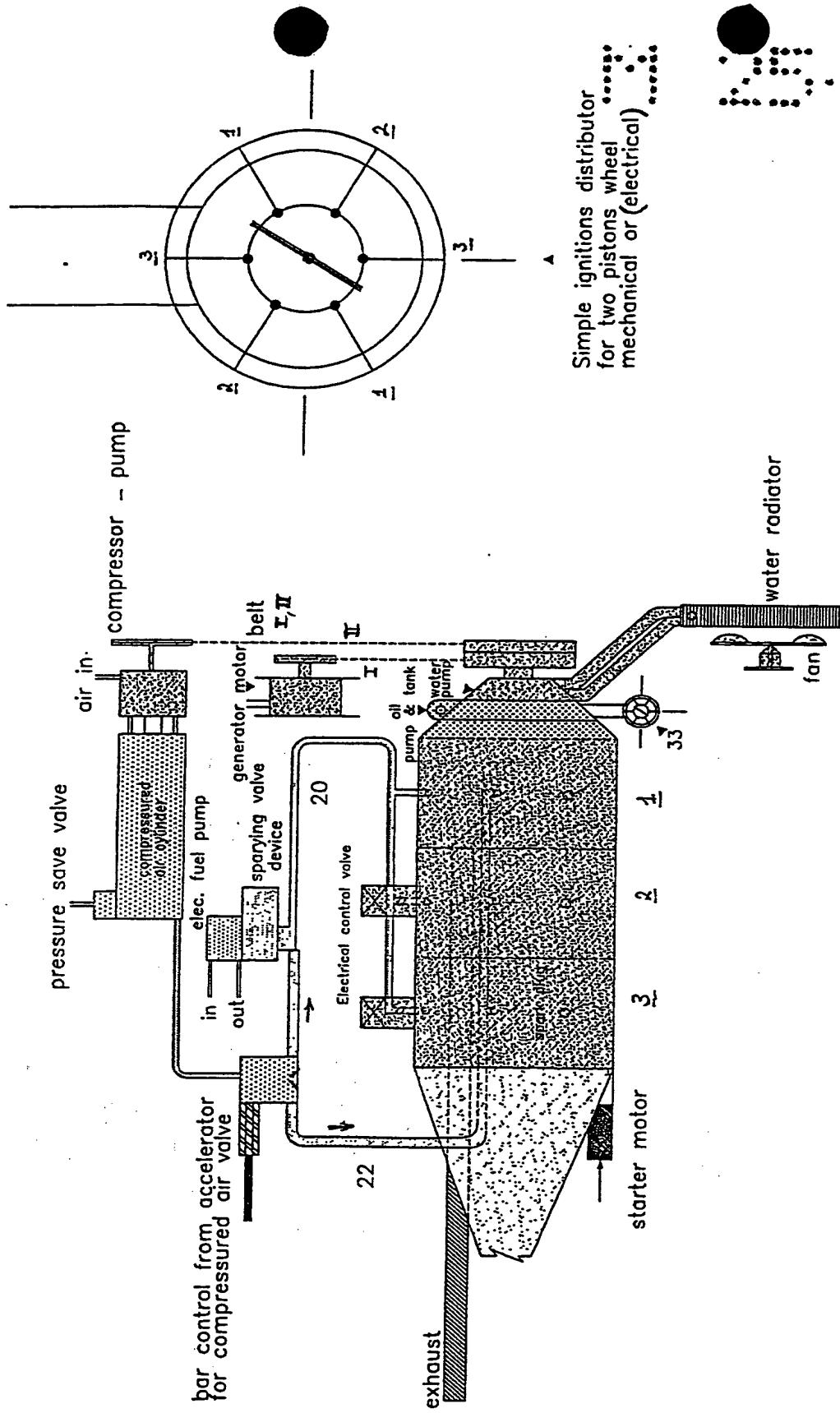


F-20 c

Section a - a

Fig. 20

M 25.09.99

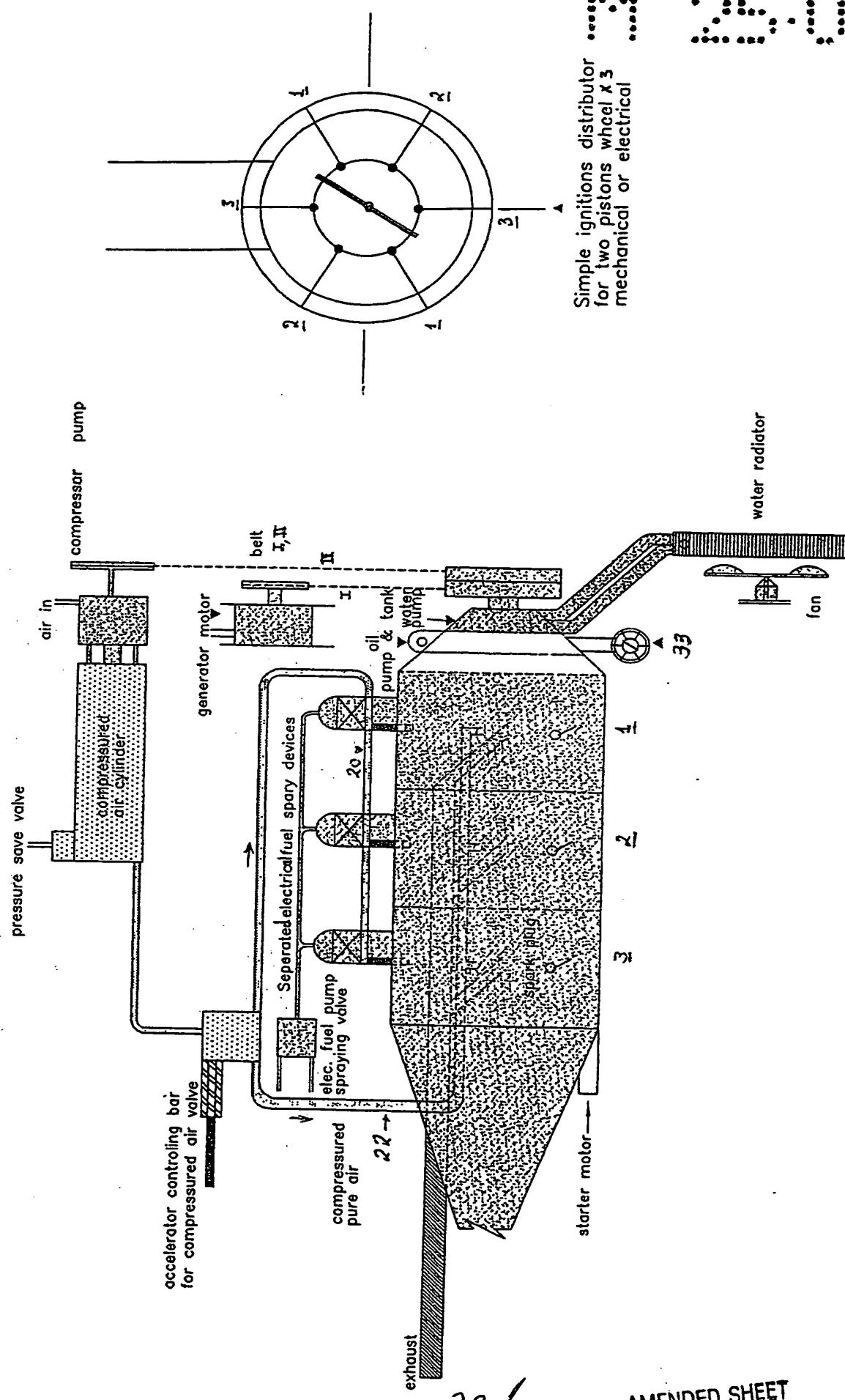


25.09.98

Proposal No: 1.  
Fuel spray injection for: all – fuel.air-mix inlet

Fig - 21

M 25.09.99

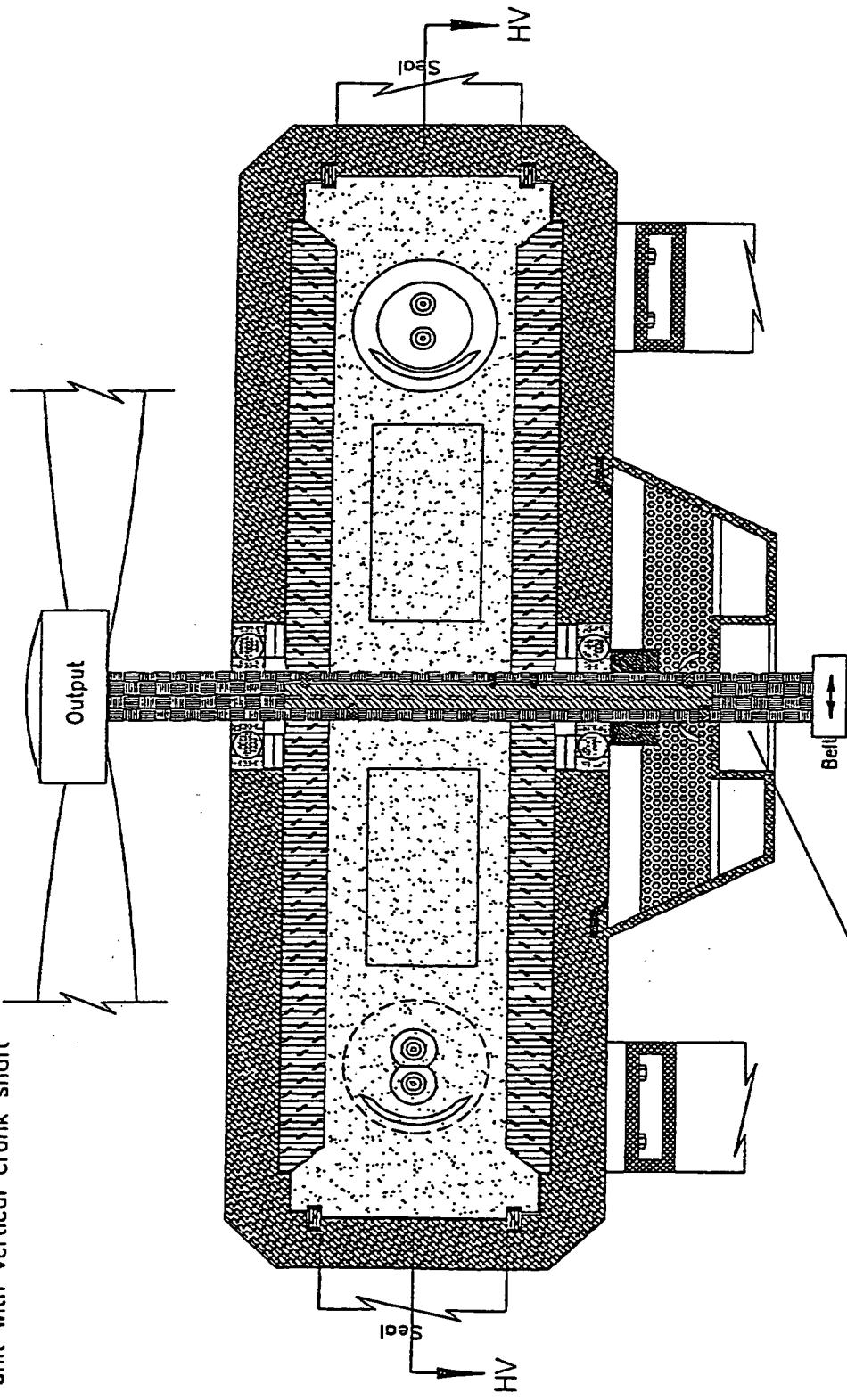


Proposal No: 2.  
Fuel spray injection for each energy unit: separated - fuel air-mix. inlet

Fig-22

M 25.09.99

Typical unit with vertical crank shaft



Oil pump not necessary  
(Using any oil cooling proposal)

One big power wheel unit  
(One big energy unit)

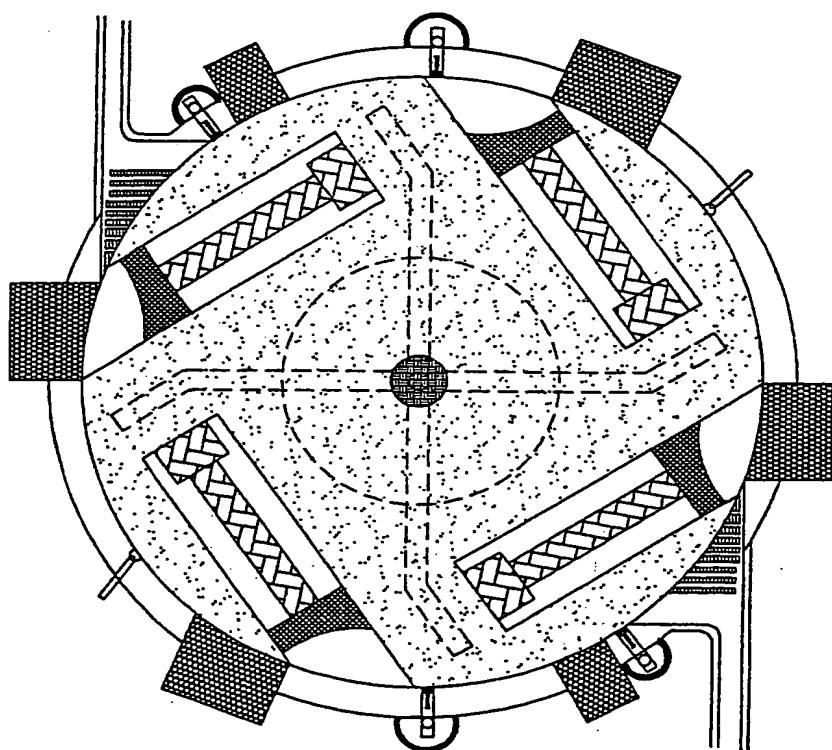
Super Power Wheel Unit  
(Dual combustion ignition system or more)  
Typical Section in vertical C. L.

Fig-23

DETROIT ENGINE

M 25.09.99

Piston cup & curve as specified

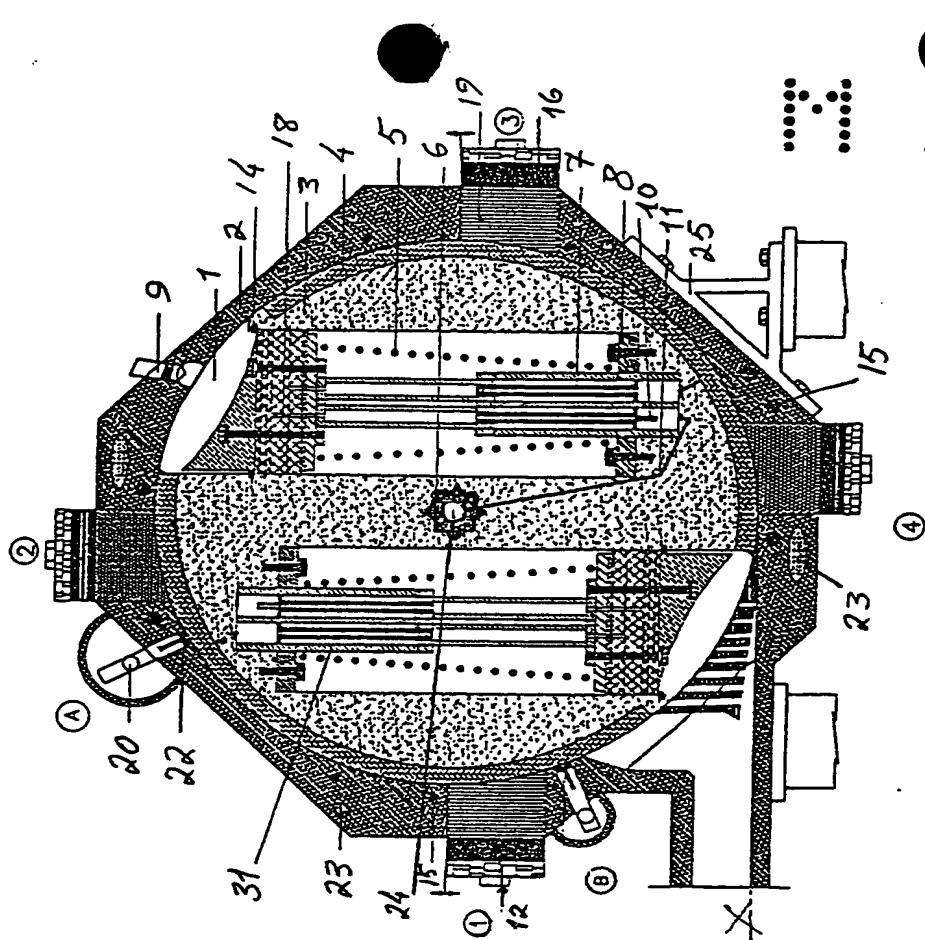


Typical unit with four pistons  
Using dual ignition system  
Section in horizontal C.L.  
(for vertical crank shaft)

section HV - HV  
A super Power Wheel Unit  
(Dual combustion ignition system)

Fig-24

000000000000000000

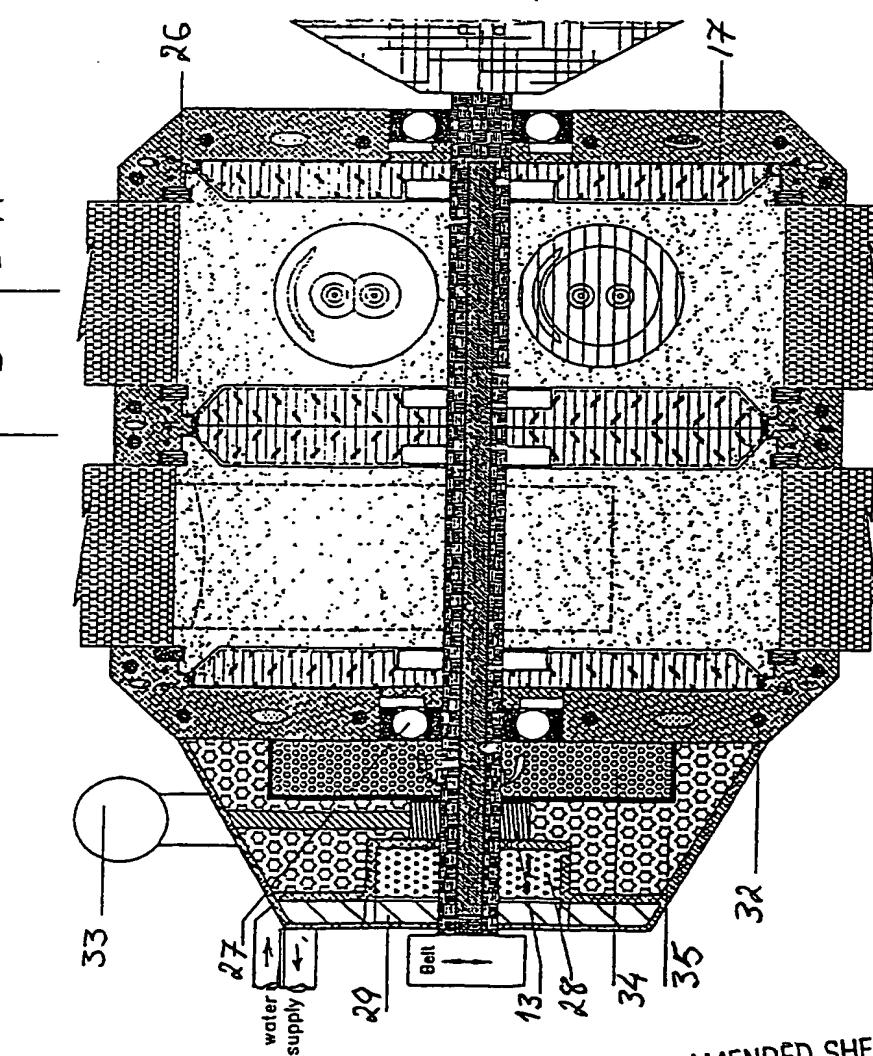


25.09.90

SECTION A - A  
Section plan at vertical c. l. of Power wheel.  
(A typical spring power modified)

F-25a

Fig-25



F-25b

TWO POWER WHEEL UNITS  
Section plan at horizontal center line (sec. H-H)

scale:  
Auto-cad.p.

AMENDED SHEET

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